

IN THE CLAIMS:

The claims are amended as follows:

Claims 1-7 (canceled)

B' 8. (Currently Amended) A waveguide directional filter arrangement ~~as claimed in claim 7~~ comprising an input waveguide and output waveguide connected by a cavity resonator comprising at least three stacked resonator elements, said input waveguide and said output waveguide each include broad wall sections joined by narrow wall sections whose aspect ratio is greater than 2:1, each said waveguide includes an aperture arranged to couple its associated waveguide to said cavity resonator, wherein edges of each aperture include inwardly extending sections, wherein at least one pair of non-adjacent resonator elements includes an additional coupling to couple the non-adjacent resonator elements, said additional coupling comprising a first pair of coupling elements each of which extends into a respective non-adjacent resonator element, said coupling elements being connected together by a first external transmission line, and a second pair of coupling elements each of which extend into a respective non-adjacent resonator element, said coupling elements of said second pair of coupling elements being connected together by a second external transmission line, said first pair of coupling elements and said second pair of coupling elements being disposed in a pre-determined spaced relationship, wherein said first pair of coupling elements and said second pair of coupling elements are disposed at approximately 90° to each other.

Claims 9-17 (canceled).

18. (Currently Amended) A waveguide directional filter arrangement ~~as claimed in claim 3~~ comprising an input waveguide and an output waveguide connected by a cavity resonator comprising at least three stacked resonator elements, wherein at least one pair of non-adjacent

resonator elements include an additional coupling to couple the non-adjacent resonator elements,
wherein at least one said resonator element includes a plurality of cooling fins operatively
attached thereto.

Claims 19-21 (canceled).

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22. (Original) In a microwave filter comprising a housing within which is disposed at least two cavity resonators coupled by aperture means in a substantially planar wall common to both said resonators, an adjustable coupling aperture arrangement including aperture means comprising at least one slit of predetermined dimensions, the at least one slit communicating with a respective access hole in said housing via an associated passageway that lies within the boundary of said wall's major surfaces, wherein said at least one slit is provided with a moveable metal slug that is slideably retained by opposite longitudinal edges of the slit, whereby said slug can be engaged and slideably manipulated by a tool means, introduced into said access hole and guided to said slug via said passageway, into a position in which electrical contact between said slug and said edges of the slit produces a desired change in effective electrical length of the slit.

23. (Original) An adjustable aperture arrangement as claimed in claim 22, wherein said slug includes a screw operated locking means arranged to be actuated by said tool means for locking said slug in said position.

24. (Original) An adjustable aperture arrangement as claimed in claim 23, wherein said slug is a rectangular-shaped block having a groove in each of two opposite parallel sides for cooperating with opposite edges of said slit for slideably retaining and gripping said block therein, said block being formed from a first trapezoid-shaped section and a second trapezoid-shaped section assembled together, with each section's non-parallel side interfacing, by a screw having a head and a threaded section, said screw's threaded section freely passing through a hole in the first trapezoid section to cooperate with a threaded hole provided in the second trapezoid-

shaped section, whereby the width between said grooves can be varied by a turning adjustment of said screw with said tool means engaging the screw's head to change the positional relationship between the said interfacing non-parallel sides to cause the slug to be either slideably retained within the slit for manipulation, or fixedly locked in electrical contact with said edges of said slit.

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25. (Original) An adjustable aperture arrangement as claimed in claim 24, wherein said aperture means comprises four slits of predetermined dimensions, extending outwardly from a central zone, each slit including a said slug, and each slit communicating with a respective said access hole via an associated said passageway.

26. (Original) An adjustable aperture arrangement as claimed in claim 25, wherein said planar wall is substantially circular in shape.

27. (Previously Amended) An adjustable aperture arrangement as claimed in claim 24, wherein the screw head includes a bayonet socket for cooperating with a tool having a T-shaped end.

Claim 28 (canceled).

29. (Previously Amended) A waveguide directional filter arrangement comprising input waveguide and an output waveguide connected by resonator structure, wherein said input waveguide and said output waveguide each include broad wall sections joined by narrow wall sections whose aspect ratio is greater than 2:1, and wherein said resonator structure comprises a housing having access holes, at least two cavity resonators coupled by an adjustable coupling aperture in a substantially planar wall common to both said resonators, said adjustable coupling aperture arrangement including at least one slit of predetermined dimensions, the at least one slit communicating with a respective access hole via an associated passageway that lies within the

boundary of major surfaces of said planar wall, wherein said at least one slit is provided with a moveable metal slug that is slideably retained by opposite longitudinal edges of the slit, whereby said slug can be engaged and slideably manipulated by a tool, introduced into said access hole and guided to said slug via said passageway, into a position in which electrical contact between said slug and said edges of the slit produces a desired change in effective electrical length of the slit.
